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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

SINGH, SUNIL

ART UNIT	PAPER NUMBER
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3672

MAIL DATE	DELIVERY MODE
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10/11/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/772,331	SCHERMEL, FERDINAND	
	Examiner	Art Unit	
	SUNIL SINGH	3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 129-144 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 129-144 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☒ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 27 August 2010 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show how member (17) is connected to member (27) in Figure 8 and same member (17) is connected to member(s) (11,16,10) in Figure 3 and the same member (17) is connected to motor (40) as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing.

MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 129-139, 140-144 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are replete with indefiniteness and antecedent basis errors that are too numerous to mention each one specifically. Some examples are noted. Applicant should carefully review all claims and make corrections accordingly.

Claim 129 does not end with a "period"; therefore it is unclear if the claim is complete or there is missing text.

Claim 130 is confusing. Claim 130 line 2, calls for "further including two independent sections"; however, claim 129 calls for a "coplanar thigh/calve section". They appear to be the same and therefore should be related.

Claim 130 lines 3-4, "a coplanar thigh/calve linear actuator" is recited; claim 129 calls for "a coplanar thigh/calve linear actuator" it appears that they are the same and should therefore be related.

Claim 130 line 4 calls for "a knee linear actuator"; claim 130 line 3, calls for "a knee linear actuator"; it appears that they are the same and should be related.

Claim 134, "said coplanar leg section" lacks clear antecedent basis.

Claim 135, "the calves section" lacks clear antecedent basis.

Claim 136, "said buttocks portion of said mattress" lacks clear antecedent basis.

Claim 136, "back portion of mattress" lacks clear antecedent basis.

Claim 137, "the mattress element" lacks clear antecedent basis.

Claim 138, "box spring" lacks clear antecedent basis.

Claim 139, "the back section of the mattress" lacks clear antecedent basis.

Claim 140 line 4, "said supporting elements" lacks clear antecedent basis.

Claim 140 line 10, "said mattress" lacks clear antecedent basis.

Claim 140 is confusing because it appears swing arm (48) appears to be attached to the "frame" (7) not the supporting elements.

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 140-144 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The originally filed fail to provide basis how the swing arm (48) can swing over the mattress.

Claims 140-144 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification fails to explain how the swing arm can swing over the

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mattress therefore, one of ordinary skill in the art cannot make and/or use the invention as claimed.

Insofar the claims are understood, the following rejection(s) below apply:

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 140-144 rejected under 35 U.S.C. 102(b) as being anticipated by US Patent (US 3574399).

US Patent discloses a multi-position reclining bed comprising supporting elements (3,2) being pivotably connected to each other at abutting edges, a back section (3), seat section (2), a swing arm (8,9,10) and armrest (5). The swing arm is attached to said supporting elements. The arm rest is attached to the swing arm.

7. Claims 129,131,132, 134, 135,137-139 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese document (2002-331005).

Japanese document '005 discloses a multi-position reclining bed comprising: a horizontally situated elongated track (5), a plurality of supporting elements (see Fig. 1) positioned above and overlying said track, and moveably coupled thereto, and comprising:

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- i. a back section (members under 9,11), moved by back linear actuator (34,36);
 - ii. a buttocks section (member under 6), moved by buttocks linear actuator (13,14); and
 - iii. a thigh/calve section (members under 10,12), moved by a thigh/calve linear actuator (35,37) said supporting elements being pivotably connected to each other at abutting edges and
- c. said back linear actuator coupled to the supporting elements, said back section being coupled to said track section and configured to move an end portion thereof vertically in a vertical plane when, said back linear actuator is activated, such that when said back section is raised or lowered, said end portion remains substantially the same distance from an adjacent wall (see Figs. 2,3), and wherein said thigh/calve section reclines pivotally below a horizontal plane of bed in a downward (see Fig. 1) direction pivotally about an adjoining edge with said buttocks section, a mattress (see Fig. 1) that rests on said plurality of supporting elements.

8. Claim 140-144 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnston et al. (US 4409695).

Johnston et al. discloses a multi-position reclining bed comprising:

- a. a horizontally situated elongated track,
- b. a plurality of supporting elements positioned above and overlying said track, and moveably coupled thereto, and comprising:
 - i. a back section, moved by back linear actuator;

ii. a thigh/calve section, moved by a thigh/calve linear actuator

said supporting elements being pivotably connected to each other at abutting edges and a swing arm and armrests, wherein said swing arm is attached to said supporting elements and said arm rests are attached to said swing arm (see disclosure).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 130 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese document '005 in view of Miller et al. (US 4494259).

Japanese document discloses the invention substantially as claimed. However, Japanese document '005 lacks a pivot fixture (cantilever mechanism). Miller et al. teaches a pivot fixture (cantilever mechanism) (see Figs. 17-19). It would have been considered obvious to one of ordinary skill in the art to modify Japanese document '005 to include a pivot fixture (cantilever mechanism) as taught by Miller et al. to provide a means to support the thigh/calve sections in a coplanar position while pivoting downwardly below the horizontal plane of the bed.

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11. Claims 136 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese document '005 in view of Roberts et al. (US5745940) and Reeder et al. (US6115861)

Japanese document '005 discloses the invention substantially as claimed. However, Japanese document '005 lacks a high coefficient of friction and low coefficient of friction. Roberts et al teaches a high coefficient of friction (100). Reeder et al. teaches low coefficient of friction (see col. 13). It would have been considered obvious to one of ordinary skill in the art to modify Japanese document '005 to include a high coefficient of friction and low coefficient of friction as taught by Roberts et al. and Reeder et al. in order to manipulate the mattress.

12. Claim 133 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese document '005 in view of Zur as applied to claim 129 above, and further in view of Johnston et al. (US 4409695).

Japanese document '005 (once modified) discloses the invention substantially as claimed. However, the (once modified) Japanese document '005 lacks a moveable footrest. Johnston et al. teaches a moveable footrest (see Fig. 1). It would have been considered obvious to one of ordinary skill in the art to further modify the (once modified) Japanese document '005 to include a footrest as taught by Johnston et al. in order to provide support for the feet when the thigh/calve sections are pivoted downwardly.

13. Claims 141-143 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent '399 or Johnson et al. '695 in view of Zur (US 4287620).

US Patent '399 and Johnson et al. '695 both disclose the invention substantially as claimed. However, they both lack the swing arm and armrest having desk/electrical and data connections secured thereto. Zur teaches a swing arm and armrest having desk/electrical and data connections secured thereto (see Figs. 15,16). It would have been considered obvious to one of ordinary skill in the art to modify either U.S. Patent '399 or Johnson et al. '695 to include desk/electrical and data connections secured to the arm and armrest as taught by Zur since such a modification increases the functionality of the bed.

14. Claims 144 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent '399 or Johnson et al. '695 in view of Kleinwolterink (US 4290423)

Patent '399 or Johnson et al. '695 both disclose the invention substantially as claimed. However, they both lack a buttocks sling. Kleinwolterink teaches a buttocks sling (120). It would have been considered obvious to one of ordinary skill in the art to further modify either Patent '399 or Johnson et al. '695 to include a buttocks sling as taught by Kleinwolterink in order to assist a patient in a wheelchair to and from the bed.

Response to Arguments

15. Applicant's arguments filed 5/8/11 have been fully considered but they are not persuasive. Applicant fails to argue how the current claims (129-144) define over the prior art. Instead applicant argues with respect to the canceled claims. In areas where

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applicable, the examiner points out where the claimed limitations called for in currently filed claims can be found the prior art.

Applicant argues that Japanese document '005 does not teach a bed. The examiner disagrees. A bed is defined as "a piece of furniture upon which a person sleeps". Clearly a person can sleep on the piece of furniture depicted in Japanese document '005 and thus constitutes a bed. Majority of applicant's arguments are far more limiting than the claimed subject matter. For example, Japanese document '005 fails to disclose a bed since one cannot roll from side to side. A bed is not defined by if one can roll from side to side. Applicant argues that Japanese document fails to teach mattress. The examiner disagrees. Members (8-12) constitutes such structure.

Applicant argues that Japanese document fails to teach a bed since one needs a stepping stool to climb up to sit on the structure disclosed by Japanese document. It should be noted that a bed is not defined by whether one needs a stool to climb up to it.

Applicant's argument with regards to Johnson failing to teach armrests that swing horizontally above the surface of the bed is far more limiting than the claimed subject matter since the claim 140 requires that the swing arm can swing over said mattress.

Applicant argues that it is not obvious to modify Japanese document to include the pivot fixture (cantilever mechanism) as taught by Miller et al. since it already has a means to support the thigh/calve section. The examiner disagrees. The thigh/calve section (10,12) of Japanese document needs to include the pivot fixture (cantilever mechanism) of Miller et al. in order to be able to support the thigh/calve section in a coplanar manner.

Applicant's arguments with regards to Reeder et al. are far more limiting than the claimed subject matter. For example, Reeder's et al. coefficient of friction is on the inside while the applicant's is on the outside.

Applicant argues that the footrest of Johnston et al. does not adjust along the thigh/calve section. The examiner disagrees. See member (82,87).

Applicant argues that modifying Johnston et al. to include the buttocks sling of Kleinwolterink would not work. The examiner disagrees. Once the thigh/calve section of Johnston et al. is lowered to the vertical position a user in a wheel chair can approach the bed, the buttocks sling can be moved of accommodate/assist the user to and from the bed.

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SUNIL SINGH whose telephone number is (571)272-7051. The examiner can normally be reached on Monday through Friday 10:30 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sunil Singh/
Primary Examiner, Art Unit 3672

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